

| Ref # | Hits   | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|--------|--|---|------------------|---------|------------------|
| S1    | 4      | dry adj etch\$3 same (arc or anti-reflective adj layer) same conductive adj layer same barrier adj layer               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/08/21 17:47 |
| S2    | 649578 | baek, i.in.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:04 |
| S3    | 68     | baek-i-h.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/08/21 17:47 |
| S4    | 60     | baek-i.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:06 |
| S5    | 0      | dry adj etch\$3 same (arc or anti-reflective adj layer) and nitric adj acid same copper and cmp with barrier adj layer | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:50 |
| S6    | 0      | dry adj etch\$3 same (arc or antireflective adj layer) and nitric adj acid same copper and cmp with barrier adj layer  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:09 |
| S7    | 2      | dry adj etch\$3 same (arc or antireflective adj layer) and wet adj etch\$3 same copper and cmp with barrier adj layer  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:17 |
| S8    | 0      | dry adj etch\$3 same (arc or antireflective adj layer) and acid same copper and cmp with barrier adj layer             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:18 |
| S9    | 0      | dry adj etch\$3 same (arc or antireflective adj layer) and acid same copper and cmp same barrier adj layer             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2005/03/01 13:18 |

# Search Notes

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|-----|------|--|---|----|-----|------------------|
| S76 | 24   | wet adj etch\$3 same copper and barrier adj layer and anti-reflective  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:49 |
| S77 | 17   | wet adj etch\$3 same aluminum and barrier adj layer and anti-reflective  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:54 |
| S78 | 3    | sulfuric adj acid same aluminum and barrier adj layer and anti-reflective                                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 15:02 |
| S79 | 10   | sulfuric adj acid same copper and barrier adj layer and anti-reflective  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:49 |
| S80 | 52   | wet adj etch\$3 same (copper or aluminum or tungsten or conoductive) and barrier adj layer and anti-reflective | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 15:11 |
| S81 | 16   | wet adj etch\$3 with (copper or aluminum or tungsten or conoductive) and barrier adj layer and anti-reflective | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 15:11 |
| S82 | 77   | baek-i-h.in.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:47 |
| S83 | 4    | dry adj etch\$3 same (arc or anti-reflective adj layer) same conductive adj layer same barrier adj layer       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:47 |
| S84 | 2488 | (438/622).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:47 |
| S85 | 384  | (438/636).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |



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|-----|------|--|---|----|-----|------------------|
| S86 | 1720 | (438/706).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S87 | 415  | (438/704).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S88 | 5526 | nitric adj acid same copper  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:48 |
| S89 | 3779 | cmp same barrier adj layer   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:48 |
| S90 | 89   | S88 and S89  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:48 |
| S91 | 415  | (438/704).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S92 | 550  | (438/690).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:49 |
| S93 | 25   | wet adj etch\$3 same copper and<br>barrier adj layer and anti-reflective   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:49 |
| S94 | 10   | sulfuric adj acid same copper and<br>barrier adj layer and anti-reflective | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:49 |
| S95 | 4    | nitric adj acid same copper and<br>barrier adj layer and anti-reflective   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:49 |

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| S10 | 3    | dry adj etch\$3 same (arc or antireflective adj layer) and wet adj etch\$3 same copper and cmp same barrier adj layer         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 13:21 |
| S11 | 1    | dry adj etch\$3 same (arc or anti-reflection adj layer) and wet adj etch\$3 same copper and cmp same barrier adj layer        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 13:21 |
| S12 | 1    | dry adj etch\$3 same (arc or anti-reflection adj layer or arl) and wet adj etch\$3 same copper and cmp same barrier adj layer | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 13:21 |
| S13 | 5    | dry adj etch\$3 same (arc or anti-reflection adj layer) same conductive adj layer same barrier adj layer                      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 13:26 |
| S14 | 1    | 2003-054538.NRAN.   | DERWENT   | OR | ON  | 2005/03/01 13:24 |
| S15 | 1    | 2003-054538   | DERWENT   | OR | ON  | 2005/03/01 13:25 |
| S16 | 944  | dongbu adj electronics  | DERWENT   | OR | ON  | 2005/03/01 13:25 |
| S17 | 1    | dongbu adj electronics and arc and copper   | DERWENT   | OR | ON  | 2005/03/01 13:25 |
| S18 | 32   | dongbu adj electronics and copper   | DERWENT   | OR | ON  | 2005/03/01 13:25 |
| S19 | 0    | dry adj etch\$3 same (arc or anti-reflective adj layer) and nitric adj acid same copper and cmp same barrier adj layer        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 13:51 |
| S20 | 10   | etch\$3 same (arc or anti-reflective adj layer) and acid same copper and cmp same barrier adj layer                           | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 14:39 |
| S21 | 361  | (438/636).CCLS.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:47 |
| S22 | 1582 | (438/622).CCLS.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:47 |



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|-----|------|-----------------------------------|---|----|-----|------------------|
| S23 | 1087 | (438/706).CCLS.                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S24 | 3    | S21 and S23 and copper            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:40 |
| S25 | 392  | (438/704).CCLS.                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S26 | 0    | S21 and S25                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:35 |
| S27 | 727  | dry adj etch and (arc or arl)     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:41 |
| S28 | 358  | dry adj etch\$3 same (arc or arl) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:41 |
| S29 | 5282 | nitric adj acid same copper       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:41 |
| S30 | 0    | S28 and S29                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:42 |
| S31 | 3342 | cmp same barrier adj layer        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:47 |
| S32 | 71   | S29 and S31                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/08/21 17:48 |

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|-----|------|--|---|----|----|------------------|
| S33 | 1    | S29 and S31 and (arl or arc)                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:43 |
| S34 | 4606 | polish\$3 same barrier adj layer               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:47 |
| S35 | 2497 | polish\$3 with barrier adj layer               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:47 |
| S36 | 77   | S35 and S29                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:47 |
| S37 | 3    | S35 and S29 and (antireflect\$3 or arc or arl) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:50 |
| S38 | 1141 | tungsten same sulphuric adj acid               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:50 |
| S39 | 15   | S38 and S35                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:51 |
| S40 | 0    | S38 and S35 and (antireflect\$3)               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:51 |
| S41 | 1321 | S38 and S35 and arc or arl                     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:51 |
| S42 | 0    | S38 and S35 and (arc or arl)                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/01 15:54 |



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|-----|------|--|---|----|-----|------------------|
| S43 | 4017 | etch\$3 with (antireflect\$3 or arc or arl)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:55 |
| S44 | 497  | dry adj etch\$3 with (antireflect\$3 or arc or arl)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:56 |
| S45 | 1978 | wet adj etch\$3 with (copper or tungsten or aluminum)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:56 |
| S46 | 53   | S35 and S45  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:57 |
| S47 | 10   | S46 and S43  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/01 15:57 |
| S48 | 9    | "6426298"  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 13:22 |
| S49 | 1    | "6426298".PN.  | USPAT;<br>USOCR   | OR | ON  | 2005/03/20 13:22 |
| S50 | 2    | ("6518206").PN.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/20 13:25 |
| S51 | 41   | dry adj etch\$3 same (arc or anti-reflection adj layer) and conductive adj layer and barrier adj layer | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 13:26 |
| S52 | 55   | dry adj etch\$3 same (arc or anti-reflection adj layer) and copper and barrier adj layer               | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:08 |

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| S53 | 3    | dry adj etch\$3 same (arc or anti-reflection adj layer) and wet same etch\$3 same copper and barrier adj layer | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 13:46 |
| S54 | 20   | (arc or anti-reflection adj layer) and wet adj etch\$3 with (copper or aluminum) and barrier adj layer         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:08 |
| S55 | 3    | (arc or anti-reflection adj layer) same wet adj etch\$3 with (copper or aluminum) and barrier adj layer        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:17 |
| S56 | 394  | (438/704).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S57 | 1419 | (438/689).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/20 14:18 |
| S58 | 517  | (438/690).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/08/21 17:48 |
| S59 | 384  | (438/754).CCLS.  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/03/20 14:18 |
| S60 | 29   | S59 and copper same nitric with acid   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:23 |
| S61 | 0    | S59 and copper and barrier adj layer and antireflective  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:25 |
| S62 | 0    | S59 and aluminum and barrier adj layer and antireflective  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/03/20 14:24 |



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|-----|-------|---|---|----|----|------------------|
| S63 | 81    | S59 and aluminum and barrier adj layer                                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:24 |
| S64 | 6     | S59 and aluminum and barrier adj layer and anti-reflective              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:24 |
| S65 | 7     | S59 and copper and barrier adj layer and anti-reflective                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:31 |
| S66 | 42974 | wet adj etch\$3 copper and barrier adj layer and anti-reflective        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:31 |
| S67 | 5     | wet adj etch\$3 with copper and barrier adj layer and anti-reflective   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:43 |
| S68 | 0     | wet adj etch\$3 with alcu and barrier adj layer and anti-reflective     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:34 |
| S69 | 5     | wet adj etch\$3 with aluminum and barrier adj layer and anti-reflective | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:39 |
| S70 | 1     | "5920799".PN.   | USPAT;<br>USOCR   | OR | ON | 2005/03/20 14:36 |
| S71 | 1     | "5834805".PN.   | USPAT;<br>USOCR   | OR | ON | 2005/03/20 14:36 |
| S72 | 1     | "5827437".PN.   | USPAT;<br>USOCR   | OR | ON | 2005/03/20 14:36 |
| S73 | 1     | "5827437".PN.   | USPAT;<br>USOCR   | OR | ON | 2005/03/20 14:39 |
| S74 | 1     | "5801082".PN.   | USPAT;<br>USOCR   | OR | ON | 2005/03/20 14:39 |
| S75 | 18    | "5827437"   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/03/20 14:39 |